IN THE CLAIMS:

Please amend the claims as follows.

31 (*Presently Amended*) A medical device comprising:

a substrate constructed and arranged for insertion into a patient; and

a plurality of monomer molecules directly graft polymerized onto the surface of the substrate from a medium having reversed phase properties from the substrate, in terms of hydrophilicity, and comprising at least one salt salt, wherein the graft ~~plymerization~~ polymerization is thermally initiated by an organic free radical initiator, which organic free radical initiator is on the surface of the substrate prior to thermal initiation.

32 (*Original*) A medical device according to claim 31, wherein the substrate is selected from the group consisting of guide wires, and catheters selected from the group consisting of PTCA catheters, cardiology catheters, central venous catheters, urinary catheters, drain catheters, and dialysis catheters.

33 (*Amended*) A medical device according to claim 31, wherein the substrate has at least one lumen, at least a portion of which is coated with monomer molecules graft polymerized to the lumen surface.

34 (*Amended*) A medical device according to claim 33, wherein the substrate has a lumen having both interior and exterior surfaces, and at least a portion of both the interior and exterior of the lumen is coated with monomer molecules graft polymerized to the lumen surface.

35 (*Presently Amended*) A system for forming a graft polymerized medical device comprising:

a substrate constructed and arranged for insertion into a patient;

an organic free radical initiator capable of thermally initiating a graft polymerization reaction on the substrate, to generate reactive radical sites on the surface of the substrate; and

a composition comprising one or more monomers in a medium which has reversed phase properties compared to the substrate, in terms of hydrophilicity, and comprising at least one salt wherein the polymer graft polymerized is grafted directly onto the substrate and wherein the graft polymerization is thermally initiated by an organic free radical initiator on the surface of the substrate at the time of thermal initiation.